

Outline

Case Study

NEUROANATOMY AND THE IMPACT ON COGNITIVE PROCESSING

- Basic neuronal anatomy
- Brain wiring: Association, projection, and commissural fiber tracts
- Brain lobes locations and ties to cognitive processes
- Cerebellum and impact upon cognition
- Case Study 1: Jacob's anxiety and how pacing the halls became therapeutic

Case Study

OPTIC SYSTEM AND VISUAL PERCEPTION

- Optic constructs, anterior-posterior fiber tracts
- Visual cortices and unique roles in visual processing
- Effect of tumors, shear injuries, CVA lesions upon visual perception
- Case study 2: Why can't my patient just see the whole worksheet like I do?
- Group Exercise: Review of vision diagnostics by discipline (PT/OT/SLP)

HOW NEUROTRANSMITTERS DRIVE THE BUS

- Internal communication systems within the brain
- Dopamine pathways and effects on cognition and reward systems
- Serotonin pathways and mood modulations

EXECUTIVE FUNCTIONS OF THE FRONTAL LOBE

- The Cognitive Pyramid and moving patients upward
- Skull anatomy and effects of shear injury - Shear injury as it affects anxiety and behavioral health
- Therapy implications for PT/OT/SLP
- Group Exercise: Review of executive function diagnostics by discipline (PT/OT/SLP)

COMMUNICATION AND THE LEFT HEMISPHERIC FUNCTIONS

- Broca's vs. Wernicke's areas
- Function of the arcuate fasciculus upon communication

SPATIAL PROCESSING AND THE RIGHT HEMISPHERIC FUNCTIONS

- Neurophysiology vs neuropathology, understanding patients' nonverbal challenges
- Inferential language and social cognition
- A sense of time and spatial organization revealed

THE HIDDEN PROCESSORS - THALAMIC INFLUENCES

- Auditory pathways and neuroanatomy
- Thalamic engagement on sensory information
- Modulation of sleep and vigilance

Case Study

MEMORY: HOW THE HIPPOCAMPUS AND THE AMYGDALA PARTNER

- Memory processes
- Memory types: Right vs left hippocampal functions
  - Hypoxia and anoxia upon memory function
  - Sleep and memory consolidation, effect of exercise on memory structures
  - Amygdala's influence upon fear-based learning and hijacking executive control
  - Case study 3: Nile's hypoxia and long term rehab outcomes

RECOVERY FROM ACCELERATION/ DECELERATION INJURIES: DIFFUSE AXONAL INJURY (DAI)

- Microanatomical features of DAI
- CTE: Chronic Traumatic Encephalopathy
- Where medications have failed
- 

AGITATION MANAGEMENT STRATEGIES

- Review how working knowledge of the Rancho Los Amigos levels and practitioner tips can avoid confrontation
- Learn trick of the trade for avoiding escalation
- Confabulation and denial—addressing the elephant in the room

ENRICHING PATIENT AND CLINICIAN RELATIONSHIPS

- The science behind meditations and mindfulness
- Reigning in the runaway situation

**Hassle-Free Cancellation Policy:** If you contact us before the event date, you can exchange for a DVD on the subject (self-study continuing education credit may be available), a certificate to attend another seminar, or receive a tuition refund less a \$30 cancel fee. Substitutions are permitted at any time.



**Seminar on DVD Package:** You can purchase a self-study package on the subject. You will receive a set of DVDs that include a digital copy of the seminar manual and post-test/evaluation. You and your colleagues can receive CE hours for a nominal fee. To determine if homestudy credits are available for your profession go to [www.pesirehab.com](http://www.pesirehab.com) or call 800-844-8260. Check with your licensing board to verify acceptance of self-study credits for license renewal. Order today by using the order form on this brochure or by calling 800-844-8260.

FREE  
- CE -  
ONLINE COURSE

Introductory  
Survival Spanish  
for Healthcare Providers

Up to 1 CE HOUR

HURRY OFFER EXPIRES  
August 15, 2019

[rehab.pesi.com/freespanish](http://rehab.pesi.com/freespanish)

NON-PROFIT  
ORGANIZATION  
US POSTAGE PAID  
EAU CLAIRE WI  
PERMIT NO 32729

Bring any training  
in-house!

Convenient • Cost-Effective • Customizable

for more information visit  
[www.pesirehab.com/inhouse](http://www.pesirehab.com/inhouse)

PESI Rehab  
P.O. Box 1000  
Eau Claire, WI 54702-1000  
A Division of PESI, Inc.

Addressing Patient Behavior by  
Brain Lesion Site



Clinical Tools & Strategies Specific to  
Patient Deficits

WHITE PLAINS, NY  
September 18, 2019

RONKONKOMA, NY  
September 19, 2019

MANHATTAN, NY  
September 20, 2019

Addressing Patient Behavior by  
Brain Lesion Site



Clinical Tools & Strategies Specific to  
Patient Deficits

- Identify cognitive dysfunction to enhance neuroplasticity for decreased fall risk and improved mobility/transfers
- Link function and behavior to more strategically written patient-driven therapy goals
- Tools to connect neuroanatomy to patient behaviors to address difficult behaviors like defiance and confusion
- Improve intervention timing by choosing proper diagnostics based on level of brain lesion
- Anticipate proper discharge plan by determining patient response in structured vs. home environments

TARGET AUDIENCE

Physical Therapists  
Physical Therapist Assistants  
Occupational Therapists  
Occupational Therapy Assistants  
Speech-Language Pathologists  
Certified Brain Injury Specialists  
Recreational Therapists  
Nurse Practitioners  
Social Workers

WHITE PLAINS, NY  
Wednesday, September 18, 2019

RONKONKOMA, NY  
Thursday, September 19, 2019

MANHATTAN, NY  
Friday, September 20, 2019



HAVE A SEMINAR IDEA? A MANUSCRIPT TO PUBLISH?

The nation's top speakers and authors contact PESI first. If you are interested in becoming a speaker or have a new topic idea, please contact Orion Tarpley at [otarpley@pesi.com](mailto:otarpley@pesi.com) or 715-855-5262.

REGISTER NOW! [pesirehab.com/express/72355](http://pesirehab.com/express/72355)



REGISTER NOW! [pesirehab.com/express/72355](http://pesirehab.com/express/72355)

A NON-PROFIT ORGANIZATION CONNECTING KNOWLEDGE WITH NEED SINCE 1979

Addressing Patient Behavior  
by Brain Lesion Site

Clinical Tools &  
Strategies Specific  
to Patients Deficits

Neuroanatomy is admittedly complex and overwhelming. Clinicians working in rehabilitation are faced with growing caseloads, diminished resources/reimbursement, and increasingly medically complex patients with the expectation of improving outcomes and reducing length of stay. Honing knowledge of clinically-relevant neuroanatomy and neuropathology can predict dysfunction and intuitively create a scaffold for assessment and treatment even before meeting the patient. Predetermining potential deficits leads to a more tightly defined diagnostic battery and expedites treatment formulation. By deducing the patient’s experience, the clinician can also prepare for behavioral barriers to engagement and understand the healing process with greater compassion.

In this one-day seminar, participants will learn intermediate level neurophysiology as it relates to cognitive-linguistic skills and behavioral control, as well as explore mindfulness techniques for stress reduction. The overlying foci of the course are to arm treating professionals with an improved clinical eye, predicting dysfunction, and expedite the pathway to treatment. Course content will also include patient-focused educational materials for stroke and traumatic brain injury ready to utilize by treating practitioners.

Speaker

**JEROME QUELLIER, MS, CCC-SLP**, is a clinical specialist in traumatic brain injury and communication disorders at a 450+ bed Level 1 Trauma hospital in Saint Paul, MN with almost 25 years of acute, residential, and outpatient rehabilitation experience. During his tenure at the hospital he has focused on neuro-based diagnostics and intervention for dysphagia, cognitive-linguistic deficits, head and neck cancer management, patient advocacy, and curriculum development. Mr. Quellier has made a career-long study of the intricacies of neurology, completed advanced training in brain dissection at Marquette University, actively engages in staff development training, and recently joined a surgery team in preserving language function during tumor resections.

In addition to his clinical practice, he has previously held a faculty position at the University of Minnesota Duluth teaching graduate level coursework, and taught undergraduate workshops as adjunct faculty at the University of Wisconsin Eau Claire. Mr. Quellier is excited to bring this topic to the forefront after working with the interdisciplinary team’s challenges in understanding the “what and why” of traumatic brain injury, stroke, neurodegenerative diseases and tumor resections as they apply to behavioral changes. He graduated *Cum Laude* with his bachelor’s degree and graduate degree from the University of Wisconsin Eau Claire.

**Speaker Disclosures:**  
Financial: Jerome Quellier has an employment relationship with Regions Hospital. He receives a speaking honorarium from PESI, Inc.  
Non-financial: Jerome Quellier is a member of the American Speech-Language-Hearing Association.

Objectives

1. Categorize the anatomy and function of lobes of the brain as they apply to behavioral control.
2. Characterize the neurophysiology of memory and effect of fear/anger upon new learning and memory.
3. Analyze the effect of traumatic and non-traumatic injuries upon cognitive centers.
4. Connect neurotransmitters with the communication system within the brain.
5. Evaluate the optic system and lesion locations that affect engagement and accuracy in therapy.
6. Recommend simple neuroanatomy-based techniques to rapidly de-escalate stress for patients and caretakers.
7. Assess neuro-behavioral barriers that impact new learning.



Questions?  
Call customer service at  
800-844-8260

SAVE BY INCLUDING THESE PRODUCTS WITH SEMINAR REGISTRATION!

Neuro Notes: Clinical Pocket Guide

By Claudia Fenderson, PT, EDD, PCS & Wen Ling, PT, PHD

- Wipe-Free History and Assessment Forms
- Organized by Preferred Practice Patterns
- First Tab Cross-References Disorders to Guide Practice Patterns
- Covers Both Pediatric & Adult Content
- Common Neuromuscular Conditions
- Red Flag Alerts

Whatever the practice setting-acute care, rehabilitation, outpatient, extended care, or in a school-turn to this handy pocket guide to the neurological examination. Small in size, but not in content, it covers all of the common neuromuscular conditions, disorders, and diseases you might encountered in patients throughout their lifespans. A spiral binding, thumb tabs and nearly 240 illustrations insure you can find just what you’re looking for. Waterproof, reusable pages let you record clinical data and then wipe the pages clean with alcohol.

Optimizing Cognitive Rehabilitation: Effective Instructional Methods

By McKay Moore Sohlberg, PHD, CCC-SLP, and Lyn S. Turkstra, PHD, CCC-SLP

Unique in its focus, this book presents evidence-based instructional methods specifically designed to help this population learn more efficiently. The expert authors show how to develop, implement, and evaluate an individualized training plan. They provide practical guidelines for teaching multistep procedures, cognitive strategies, the use of external aids, and more.

Visit our Online Product Store: [www.pesirehab.com/store](http://www.pesirehab.com/store)

Live Seminar Schedule

- 7:30 Registration/Morning Coffee & Tea
- 8:00 Program begins
- 12:00-1:00 Lunch (on your own)
- 3:30 Program ends

There will be two 15-min breaks (mid-morning & mid-afternoon).  
Actual lunch and break start times are at the discretion of the speaker.  
A more detailed schedule is available upon request.



PESI Inc. is proud to offer this seminar (at these locations only) *free* of charge (on live seminar tuition) for veterans and active duty military personnel. *Limited seats available; advance online registration required.*

Live Seminar Continuing Education Credit Information

*Credits listed below are for full attendance at the live event only. After attendance has been verified, pre-registered attendees will receive an email from PESI Customer Service with the subject line, "Evaluation and Certificate" within one week. This email will contain a link to complete the seminar evaluation and allow attendees to print, email or download a certificate of completion if in full attendance. For those in partial attendance (arrived late or left early), a letter of attendance is available through that link and an adjusted certificate of completion reflecting partial credit will be issued within 30 days (if your board allows). Please see "LIVE SEMINAR SCHEDULE" on this brochure for full attendance start and end times. NOTE: Boards do not allow credit for breaks or lunch.*

*If your profession is not listed, please contact your licensing board to determine your continuing education requirements and check for reciprocal approval. For other credit inquiries not specified below, or questions on home study credit availability, please contact [cepesi@pesi.com](mailto:cepesi@pesi.com) or 800-844-8260 before the event.*

*Materials that are included in this course may include interventions and modalities that are beyond the authorized practice of mental health professionals. As a licensed professional, you are responsible for reviewing the scope of practice, including activities that are defined in law as beyond the boundaries of practice in accordance with and in compliance with your profession's standards.*

*PESI, Inc. offers continuing education programs and products under the brand names PESI, PESI Healthcare, PESI Rehab and Psychotherapy Networker.*

**Nurses, Nurse Practitioners, and Clinical Nurse Specialists:** PESI, Inc. is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Nurses in full attendance will earn 6.0 contact hours. Partial contact hours will be awarded for partial attendance.

**Occupational Therapists & Occupational Therapy Assistants:** PESI, Inc. is an AOTA Approved Provider of continuing education. Provider #: 3322. Full attendance at this course qualifies for 6.0 contact hours or .6 CEUs in the Category of Domain of OT and Occupational Therapy Process. Partial credit will be issued for partial attendance. The assignment of AOTA CEUs does not imply endorsement of specific course content, products, or clinical procedures by AOTA. Course Level: Intermediate.

**Physical Therapists & Physical Therapist Assistants:** This activity consists of 6.0 clock hours of instruction that is applicable for physical therapists. CE requirements for physical therapists vary per state/jurisdiction. Please retain the certificate of completion that you receive and use as proof of completion when required.

**New Jersey Physical Therapists & Physical Therapist Assistants:** This course has been approved by the New Jersey Board of Physical Therapy Examiners for 6.0 credits. Board Course Number: 1807-77.

**New York Physical Therapists & Physical Therapist Assistants:** PESI, Inc. is recognized by the New York State Education Department, State Board for Physical Therapy as an approved provider for physical therapy and physical therapy assistant continuing education. This course qualifies for 7.2 Contact Hours.

APPROVED PROVIDER  
CE  
ASHA  
CONTINUING  
EDUCATION  
AMERICAN SPEECH-LANGUAGE-HEARING ASSOCIATION

information for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

PESI, Inc. is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. See course description for number of ASHA CEUs, instructional level and content area. ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

**Speech-Language Pathologists:** This course is offered for .6 ASHA CEUs (Intermediate level, Professional area).

**Social Workers:** PESI, Inc., #1062, is approved to offer social work continuing education by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program. Organizations, not individual courses, are approved as ACE providers. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. PESI, Inc. maintains responsibility for this course. ACE provider approval period: January 27, 2017 - January 27, 2020. Social Workers completing this course receive 6.0 Clinical Practice continuing education credits. Course Level: Intermediate. Full attendance is required; no partial credits will be offered for partial attendance. A certificate of attendance will be awarded at the end of the program to social workers who complete the program evaluation.

**New Jersey Social Workers:** Addressing Patient Behavior by Brain Lesion Site: Clinical Tools & Strategies Specific to Patient Deficits, Course #2510, is approved by the Association of Social Work Boards (ASWB) Approved Continuing Education (ACE) program to be offered by PESI, Inc. as an individual course. Individual courses, not providers, are approved at the course level. State and provincial regulatory boards have the final authority to determine whether an individual course may be accepted for continuing education credit. ACE course approval period: 05/23/2019 - 05/23/2021. Social workers completing this course receive 6.0 Clinical Practice continuing education credits. Full attendance is required; no partial credits will be offered for partial attendance.

**New York Social Workers:** PESI, Inc. is recognized by the New York State Education Department's (NYSED) State Board for Social Work as an approved provider of continuing education for licensed social workers #SW-0008. This activity will qualify for 7.0 contact hours. Full attendance is required; no partial credits will be offered for partial attendance.

**Other Professions:** This activity qualifies for 360 minutes of instructional content as required by many national, state and local licensing boards and professional organizations. Save your course outline and certificate of completion, and contact your own board or organization for specific requirements.



PLEASE RETURN ENTIRE REGISTRATION FORM

ONLINE

[pesirehab.com/express/72355](http://pesirehab.com/express/72355)

PHONE

800-844-8260

Please have credit card available

FAX

800-554-9775

MAIL

PESI Rehab  
PO BOX 1000  
Eau Claire, WI  
54702-1000

How to Register

ADDRESSING PATIENT BEHAVIOR BY BRAIN LESION SITE

Questions? Visit [www.pesirehab.com/faqs](http://www.pesirehab.com/faqs), or call 800-844-8260

- 1 Please complete entire form (to notify you of seminar changes):  
please print; staple duplicate forms.

**Mail Code:** \_\_\_\_\_  
See mail code box on address panel on reverse side

Name \_\_\_\_\_ Profession \_\_\_\_\_

Employer Name \_\_\_\_\_

Employer Address \_\_\_\_\_

Dept/Floor/Suite \_\_\_\_\_

City \_\_\_\_\_ County \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

Home/Cell Ph ( ) \_\_\_\_\_

Dept. Ph ( ) \_\_\_\_\_

\*E-mail address \_\_\_\_\_

\*Registrant's e-mail is required to receive your certificate of completion and registration confirmation.

- 2 Check location: (make copy of locations)

WHITE PLAINS, NY  
September 18, 2019

Crowne Plaza  
66 Hale Ave • 10601  
(914) 682-0050

72355WPL

RONKONKOMA, NY  
September 19, 2019

Courtyard Long Island MacArthur Airport  
5000 Express Drive South • 11779  
(631) 612-5000

72355RON

MANHATTAN, NY  
September 20, 2019

Martinique New York  
49 W 32nd St • 10001  
(212) 736-3800

72355NYO

Register now!

[pesirehab.com/express/72355](http://pesirehab.com/express/72355)

ADA NEEDS

We would be happy to accommodate your ADA needs; please call at least two weeks prior to the seminar date.

WALK-INS

Walk-ins are welcome but admission cannot be guaranteed. Call M-F 7:00-6:00 Central Time for space availability if registering within one week of seminar.

TUITION OPTIONS

• **FREE Military Tuition:** PESI Inc. is proud to offer this seminar (at these locations only) free of charge (on live seminar tuition) for veterans and active duty military personnel. *Limited seats available; advance online registration required.*

• **\$30 Tuition:** If you are interested in being our registration coordinator for the day, go to: [www.pesirehab.com/coord](http://www.pesirehab.com/coord) for availability and job description, or call our Customer Service Dept. at 800-844-8260.

• **Groups of 10 or more:** Call 800-844-8260 for discounts.

• **Discounted Student Rate:** As part of its mission to serve educational needs, PESI, Inc. offers a reduced rate of 50% off standard tuition for students. Enclose a current student schedule with registration form. Go to [www.pesirehab.com/faqs](http://www.pesirehab.com/faqs) or call 800-844-8260 for details. *Advanced registration required. Cannot be combined with other discounts.*

- 3 Check tuition:

**TUITION** with seminar manual \_\_\_\_\_

**\$209.99** – choose one of the options below:

- ☐ per person for 2 or more preregistering together —OR—
- ☐ single registration postmarked 3 weeks prior to seminar date

☐ **\$229.99** standard

ADD-ON PRODUCTS

Distributed at seminar—FREE SHIPPING!

- ☐ **\$37.95\* Neuro Notes: Clinical Pocket Guide**
- ☐ **\$57.00\* Optimizing Cognitive Rehabilitation: Effective Instructional Methods** book

\*Attendees add applicable state and local taxes except in AK, DE, MT, NH, OR

- 4 Indicate method of payment:

**ALL REGISTRATIONS MUST BE PREPAID.**  
Purchase orders welcome (attach copy).

☐ Check enclosed payable to **PESI, Inc.**

☐ MC 16 digits ☐ VISA 13-16 digits ☐ AE 15 digits ☐ Discover Novus 16 digits

Card # \_\_\_\_\_

Card Exp. \_\_\_\_\_ V-Code #: \_\_\_\_\_

Signature \_\_\_\_\_

(\*MC/VISA/Discover: last 3-digit # on signature panel on back of card.)

(\*American Express: 4-digit # above account # on face of card.)

CAN'T ATTEND THE SEMINAR?

See below for individual product orders

Addressing Patient Behavior by Brain Lesion Site

\_\_\_ Seminar on DVD\* (video) \$199.99 (RNV020789)

\_\_\_ **Neuro Notes: Clinical Pocket Guide\*** \$37.95 (SAM083215)

\_\_\_ **Optimizing Cognitive Rehabilitation: Effective Instructional Methods** book\* \$57.00 (SAM074335)

	Product total \$ _____
	*Shipping _____
	<b>Subtotal</b> _____
	**Tax _____
	<b>TOTAL</b> _____

CE hours and approvals on products may differ from live CE approvals.

\*Shipping is \$6.95 first item + \$2.00 each add'l item.

\*\*Residents add applicable state and local taxes except in AK, DE, MT, NH, OR

FOR OFFICE USE ONLY

Fed ID # 26-3896894 © 2019 PESI, Inc.

OT